

Cleaning up bacteria in the Skokomish Watershed

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## An update for valley residents

In 1999, an effort began to clean up bacteria in the Skokomish watershed. There was enough bacteria in the main river and several tributaries to potentially make swimmers or fishermen sick. Too much bacteria was also threatening to close commercial shellfish harvest in Annas Bay. The Department of Ecology (Ecology) conducted a water quality study with help from the Skokomish Tribe. Then local jurisdictions, some valley residents, and state agencies developed a cleanup plan.



It's been a year since we finished the plan. We wanted to let you know what's been done, how the water quality looks now, and what's coming up.

### *What's been done?*

The cleanup plan had a number of actions planned for the first phase of cleanup. Following is a list of those actions and how we're doing:

| Cleanup action                                                                                                                                                                                                                                                                                                                           | Who                                              | Status                                                                                                                                                                                                                                                                                                                                                   |
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| <i>Agricultural best management practices</i>                                                                                                                                                                                                                                                                                            | Local landowners and Mason Conservation District | ✓ Since 1999, when cleanup began, 10,000 feet of fence have been installed to keep livestock out of the water. Nine streamside acres have been planted to "filter" water running off the land and stabilize stream banks. Other landowner practices, such as good pasture management and gutters and downspouts, have also helped improve water quality. |
| <i>Septic systems</i> <ul style="list-style-type: none"><li>▪ Buy out frequently-flooded properties</li><li>▪ Pilot project to start an operations and maintenance program</li><li>▪ Concerns about storage of commercial septage</li><li>▪ A windshield survey to identify residential septic systems that might be a problem</li></ul> | Mason County                                     | <ul style="list-style-type: none"><li>✓ 20 properties purchased</li><li>✓ well underway, will complete fall 2004</li><li>✓ resolved</li><li>✓ Survey complete, no problems found</li></ul>                                                                                                                                                               |

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| <ul style="list-style-type: none"> <li>▪ Septic systems at hatcheries</li> <li>▪ Neighborhood meetings on septic maintenance</li> <li>▪ Survey on-site septic systems on the reservation for failures</li> <li>▪ Move homes from frequently flooded-areas of reservation</li> <li>▪ Wastewater treatment facility for reservation</li> </ul>                                                   | <p>WA Dept. of Fish and Wildlife (DFW)</p> <p>SeaGrant</p> <p>Skokomish Tribe</p> | <ul style="list-style-type: none"> <li>✓ Pumped, inspected and repaired the systems at all hatcheries.</li> <li>- No funding available.</li> <li>- Tribe will conduct dye tests in 2004; maintenance up to homeowner, Indian Health Service assists upgrades.</li> <li>✓ Twelve (12) homes raised foundations. Some septic systems upgraded. Long-range plans ongoing.</li> <li>- The Tribe has completed a facility plan. Ecology is now conducting a SEPA (State Environmental Policy Act) process on the plan.</li> </ul> |
| <p><b>Recreation</b></p> <ul style="list-style-type: none"> <li>▪ Browns Creek Campground sign to direct campers on up the valley</li> <li>▪ Reduce recreational use at "the dips" - post as private, and work with sheriff's office to enforce.</li> <li>▪ Develop flyer for fishermen in Purdy Creek area</li> <li>▪ Provide public toilet in Purdy Ck area during fishing season</li> </ul> | <p>USFS</p> <p>Various</p> <p>Various</p> <p>DFW</p>                              | <ul style="list-style-type: none"> <li>✓ Sign installed along Skokomish Valley Road.</li> <li>- Underway. Will be planted with willow and posted with no trespassing signs before summer use begins.</li> <li>✓ Flyer produced and left by residents on windshields.</li> <li>✓ Portable toilet provided this year. Working out details on permanent facility.</li> </ul>                                                                                                                                                    |
| <p><b>Control wildlife at hatcheries</b></p>                                                                                                                                                                                                                                                                                                                                                   | DFW                                                                               | <ul style="list-style-type: none"> <li>✓ ongoing</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <p><b>Enforcement</b></p>                                                                                                                                                                                                                                                                                                                                                                      | Ecology or the Environmental Protection Agency                                    | <ul style="list-style-type: none"> <li>- Landowners understand the problem and have responded well. Enforcement will be used where voluntary improvements have not been possible.</li> </ul>                                                                                                                                                                                                                                                                                                                                 |

### ***How does water quality look now?***

The Skokomish Tribe monitors water quality throughout the Skokomish watershed monthly. Those sampling results show noticeable improvement throughout the area studied in 1999, particularly above the Hwy 101 Bridge.

The 1999 study went only as far downstream as the Hwy 106 Bridge. Although water quality upstream from the bridge has improved since the study, water quality in Annas Bay has worsened. There is serious concern that shellfish harvest will be restricted.

In addition, Hood Canal has severely low levels of dissolved oxygen at some times of year. Bacteria in the water indicate that manure or sewage is present. Organic matter like manure and sewage consume oxygen as they decay in water. The Skokomish watershed may be part of the problem in Hood Canal.

### ***What's Coming Up?***

The cleanup plan was developed by a group that included valley residents and representatives of the Skokomish Tribe and responsible local and state agencies. Most of the original members continue to meet quarterly to see through the cleanup. If you'd like to attend one of our meetings, please contact one of the people listed below.

Cleanup efforts will continue in the area above the Hwy 106 Bridge. In addition, to protect the important economic and environmental value of the Annas Bay shellfish and Hood Canal fisheries, we will be looking at sources of bacteria in the area below the Hwy 106 Bridge. The Tribe plans to expand its sampling stations below the 106 bridge and at areas east and west of the river mouth.

In order to be sure that bacteria have been reduced to the levels set by the 1999 water quality study, a very strict sampling study is required, under an approved sampling plan. The workgroup is working on the needed sampling plan. Monitoring will focus on four locations identified in the 1999 study: the 106 bridge, Purdy Creek at Bourgault Road, Weaver Creek at Bourgault Road, and Ten Acre Creek near the mouth.

We expect the monitoring program to begin late this summer. The results will tell us where we have achieved the goals set by the water quality study. Once the goals are achieved, Ecology will monitor every five years to make sure the water stays healthy.

### ***Want to know more?***

Information on the water quality study and the implementation plan are on Ecology's website at <http://www.ecy.wa.gov/programs/wq/tmdl/watershed/skokomish/index.html>

Or you can contact:

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**Thanks for your interest in water quality in the Skokomish Watershed!**

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